

# Shuangning Li

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CONTACT INFORMATION	150 Western Avenue Boston, MA 02134	shuangningli@fas.harvard.edu <a href="https://lsn235711.github.io/">https://lsn235711.github.io/</a>
EMPLOYMENT	<b>Harvard University</b> Postdoctoral Researcher, Sep 2022 - present. Advisor: Susan Murphy.	
EDUCATION	<b>Stanford University</b> Ph.D. in Statistics, Sep 2017 - Jun 2022. Advisors: Emmanuel Candès, and Stefan Wager. <b>University of Hong Kong</b> Bachelor of Science, Sep 2013 - Jun 2017.	
AWARDS	Theodore W. Anderson Theory of Statistics Dissertation Award, Stanford University, 2022. Centennial Teaching Assistant Award, Stanford University, 2021. Departmental Teaching Assistant Award, Stanford University, 2019, 2020. ACIC (Atlantic Causal Inference Conference) Travel Award, 2019. EDGE Fellowship, Stanford University, 2017.	
RESEARCH INTERESTS	Causal inference; Multiple hypothesis testing; Selective inference; Statistical reinforcement learning; Inference in the presence of interference.	
PUBLICATIONS	Li, Shuangning, Lluís Salvat Niell, Sung Won Choi, Inbal Nahum-Shani, Guy Shani, and Susan Murphy. <b>Dyadic Reinforcement Learning</b> . <i>arXiv preprint arXiv:2308.07843</i> (2023). Li, Shuangning, Ramesh Johari, Stefan Wager, and Kuang Xu. <b>Experimenting under Stochastic Congestion</b> . <i>arXiv preprint arXiv:2302.12093</i> (2023). Li, Shuangning, and Stefan Wager. <b>Network Interference in Micro-Randomized Trials</b> . <i>arXiv preprint arXiv:2202.05356</i> (2022). Li, Shuangning, and Emmanuel Candès. <b>Deploying the Conditional Randomization Test in High Multiplicity Problems</b> . <i>Journal of the American Statistical Association</i> , in revision. Li, Shuangning, and Molei Liu. <b>Maxway CRT: Improving the Robustness of Model-X Inference</b> . <i>Journal of the Royal Statistical Society (Series B)</i> , forthcoming (2023+). Han, Kevin, Shuangning Li, Jialiang Mao, and Han Wu. <b>Detecting Interference in A/B Testing with Increasing Allocation</b> . <i>ACM SIGKDD International Conference on Knowledge Discovery and Data Mining</i> (2023). Li, Shuangning, Zhimei Ren, Chiara Sabatti, and Matteo Sesia. <b>Transfer Learning in Genome-Wide Association Studies with Knockoffs</b> . <i>Sankhya B</i> (2022): 1-39. Li, Shuangning, and Stefan Wager. <b>Random Graph Asymptotics for Treatment Effect Estimation under Network Interference</b> . <i>Annals of Statistics</i> 50, no. 4 (2022): 2334-2358. Ding, Daisy Yi, Shuangning Li, Balasubramanian Narasimhan, and Robert Tibshirani. <b>Cooperative Learning for Multiview Analysis</b> . <i>Proceedings of the National Academy of Sciences</i> 119,	

no. 38 (2022).

Hu, Yuchen, Shuangning Li, and Stefan Wager. **Average Direct and Indirect Causal Effects under Interference.** *Biometrika* 109, no. 4 (2022): 1165-1172.

Li, Shuangning, Matteo Sesia, Yaniv Romano, Emmanuel Candès, and Chiara Sabatti. **Searching for Robust Associations with a Multi-Environment Knockoff Filter.** *Biometrika* 109, no. 3 (2022): 611-629.

Brown, Mark, and Shuangning Li. **Sharp Bounds for Exponential Approximations of NWUE Distributions.** *Methodology and Computing in Applied Probability* 20, no. 3 (2018): 875-896.

#### TALKS

Conference on Digital Experimentation, MIT, Oct 2023.

INFORMS Annual Meeting, Phoenix, Arizona, Oct 2023.

[Online] Causal Inference Seminar, LinkedIn, Oct 2023.

Research in Statistics Seminar, Harvard University, Sep 2023.

Quantitative Methods Seminar, Purdue Daniels School of Business, Sep 2023.

Joint Statistical Meetings, Toronto, Canada, Aug 2023.

INFORMS Applied Probability Society Conference, Nancy, France, Jun 2023.

INFORMS Manufacturing and Service Operations Management Conference, Montreal, Canada, Jun 2023.

Nordic Conference in Mathematical Statistics, Gothenburg, Sweden, Jun 2023.

ICSA Applied Statistics Symposium, Ann Arbor, Michigan, Jun 2023.

New England Statistics Symposium, Boston University, Jun 2023.

American Causal Inference Conference, Austin, Texas, May 2023.

[Online] Seminar at Department of Statistical Learning, Leipzig University, May 2023.

Research in Statistics Seminar, Harvard University, Apr 2023.

Causal Markets Group, Stanford University, Mar 2023.

[Online] Discussant at International Seminar on Selective Inference, Mar 2023.

[Online] International Conference of the ERCIM WG on Computational and Methodological Statistics, London, UK, Dec 2022.

Conference on Digital Experimentation, MIT, Oct 2022.

INFORMS Annual Meeting, Indianapolis, Indiana, Oct 2022.

Cornell Young Researchers Workshop, Cornell University, Oct 2022.

[Online] Deep Learning for Genetics, Genomics and Metagenomics: Latest developments and New Directions, Banff International Research Station, Jun 2022.

American Causal Inference Conference, Berkeley, California, May 2022.

[Online] Journal Club at Simulation and Experimentation Team, Amazon, May 2022.

California Econometrics Conference, Stanford University, May 2022.

[Online] Nathan Kallus's Group, Apr 2022.

Causal Inference Group, Stanford University, Apr 2022.

[Online] Online Causal Inference Seminar, Mar 2022.

Workshop on Quantile Regression and Data Heterogeneity, Miami, Florida, Feb 2022.

Causal Inference Group, Stanford University, Nov 2021.

[Online] Statistics Seminar, University of Cambridge, Nov 2021.

[Online] International Seminar on Selective Inference, Nov 2021.

Industrial Affiliates Annual Conference, Stanford University, Nov 2021.

[Online] Joint Statistical Meetings, Aug 2021.

[Online] Statistics Seminar, Lyft, May 2021.  
Conference of the Applied Stochastic Models and Data Analysis, Florence, Italy, Jun 2019.  
Atlantic Causal Inference Conference, Montreal, Canada, May 2019.  
Causal Inference Group, Stanford University, Feb 2019.  
Conference of the Applied Stochastic Models and Data Analysis, London, UK, Jun 2017.

PROFESSIONAL  
SERVICES

Reviewer for journals: Annals of Applied Probability, Annals of Applied Statistics, Annals of Statistics, Biometrics, Biometrika, IEEE Transactions on Information Theory, Journal of the American Statistical Association, Journal of Computational and Graphical Statistics, Journal of the Royal Statistical Society (Series B), Machine Learning, Management Science, Operations Research, Proceedings of the National Academy of Sciences, Statistics in Medicine, Transactions on Machine Learning Research.

Reviewer for conferences: Conference on Neural Information Processing Systems (NeurIPS), International Conference on Learning Representations (ICLR), International Conference on Machine Learning (ICML), IEEE International Symposium on Information Theory (ISIT).

Session chair for conferences: Applied Probability Society at 2022 INFORMS Annual Meeting, 2023 Joint Statistical Meetings, Applied Probability Society at 2023 INFORMS Annual Meeting.

TEACHING

As a teaching assistant at Stanford University:

Winter 2022	STATS 315A: Modern Applied Statistics: Learning
Autumn 2021	STATS 200: Introduction to Statistical Inference
Summer 2021	STATS 60: Introduction to Statistical Methods: Precalculus
Spring 2021	STATS 305C: Applied Statistics III
Winter 2021	STATS 315A: Modern Applied Statistics: Learning
Autumn 2020	STATS 200: Introduction to Statistical Inference
Spring 2020	STATS 315B: Modern Applied Statistics: Data Mining
Winter 2020	STATS 315A: Modern Applied Statistics: Learning
Summer 2019	STATS 241: Data-driven Financial Econometrics
Spring 2019	STATS 116: Theory of Probability
Winter 2019	STATS 200: Introduction to Statistical Inference
Autumn 2018	STATS 240: Statistical Methods in Finance
Summer 2018	STATS 237: Investment Portfolios, Derivative Securities, Risk Measures
Spring 2018	STATS 207: Introduction to Time Series Analysis
Winter 2018	STATS 200: Introduction to Statistical Inference